

GCSE MATHS • GRADE 2

MATHS



MODEL ANSWERS

USING A CALCULATOR

SCORE

/185

PERCENTAGE

%

STEMUP

1 Find $\sqrt{3.24}$

$$1.8 \times 1.8 = 3.24$$

1.8

/ 1

2 Find 7.1^2

$$7.1 \times 7.1$$

50.41

/ 1

3 Find $\sqrt{5.0176}$

$$2.24 \times 2.24 = 5.0176$$

2.24

/ 1

4 Find $\sqrt{2.6244}$

$$1.62 \times 1.62 = 2.6244$$

1.62

/ 1

5 Find 2.27^2

$$2.27 \times 2.27$$

5.1529

/ 1

6 Find $\sqrt{82.81}$

$$9.1 \times 9.1 = 82.81$$

9.1

/ 1

7 Find 3.4^2

$$3.4 \times 3.4$$

11.56

/ 1

8 Find $\sqrt{12.25}$

$$3.5 \times 3.5 = 12.25$$

3.5

/ 1

9 Find $\sqrt{94.09}$

$$9.7 \times 9.7 = 94.09$$

9.7

/ 1

10 Find 3^6

$$3^6 = 729$$

729

/ 1

11 Find $\sqrt{59.29}$

$$7.7 \times 7.7 = 59.29$$

7.7

/ 1

12 Find $\sqrt{5.76}$

$$2.4 \times 2.4 = 5.76$$

2.4

/ 1

13 Find 6^5

$$6^5 = 7,776$$

7,776

/ 1

14 Find $\sqrt{2.25}$

$$1.5 \times 1.5 = 2.25$$

1.5

/ 1

15 Find 5^6

$$5^6 = 15,625$$

15,625

/ 1

16 Find 9^6

$$9^6 = 531,441$$

531,441

/ 1

17 Find $\sqrt{56}$

Give your answer correct to 2 decimal places.

$$\sqrt{56} = 7.483314774$$

7.48

/ 1

18 Find $2.8^2 + 3.7^2$

$$7.84 + 13.69 = 21.53$$

21.53

/ 1

19 Find 6^6

$$6^6 = 46,656$$

46,656

/ 1

20 Find $\sqrt{84}$

Give your answer correct to 2 decimal places.

$$\sqrt{84} = 9.16515139$$

9.17

/ 1

21 Find $4.7^2 - 2.3^2$

$$22.09 - 5.29 = 16.8$$

16.8

/ 1

22 Find 1.7^3

$$1.7 \times 1.7 \times 1.7$$

4.913

1 / 1

23 Find $\sqrt{48}$

Give your answer correct to 2 decimal places.

$$\sqrt{48} = 6.92820323$$

6.93

1 / 1

24 Find $3.6^2 - 1.5^2$

$$12.96 - 2.25 = 10.71$$

10.71

1 / 1

25 Find 3.9^3

$$3.9 \times 3.9 \times 3.9$$

59.319

/ 1

26 Find $\sqrt{2}$

Give your answer correct to 3 decimal places.

$$\sqrt{2} = 1.414213562$$

1.414

/ 1

27 Find $1.1^2 + 2^2$

$$1.21 + 4 = 5.21$$

5.21

/ 1

28 Find $\sqrt{38}$

Give your answer correct to 3 decimal places.

$$\sqrt{38} = 6.164414003$$

6.164

/ 1

29 Find $\sqrt{39}$

Give your answer correct to 3 decimal places.

$$\sqrt{39} = 6.244997998$$

6.245

/ 1

30 Find $3.8^2 + 1.6^2$

$$14.44 + 2.56 = 17$$

17

/ 1

31 Work out $0.5 + 3.7^2$

Write down all the figures on your calculator display.

$$0.5 + 13.69 = 14.19$$

14.19

1 / 1

32 Find $\sqrt{66}$

Give your answer correct to 3 decimal places.

$$\sqrt{66} = 8.124038405$$

8.124

1 / 1

33 Find $4.8^2 - 3.7^2$

$$23.04 - 13.69 = 9.35$$

9.35

1 / 1

34 Work out $0.36 + 1.7^2$

Write down all the figures on your calculator display.

$$0.36 + 2.89 = 3.25$$

3.25

/ 1

35 Find $\sqrt{71}$

Give your answer correct to 3 decimal places.

$$\sqrt{71} = 8.426149773$$

8.426

/ 1

36 Find $4.8^2 - 4.7^2$

$$23.04 - 22.09 = 0.95$$

0.95

/ 1

37 Work out $0.31 + 1.5^2$

Write down all the figures on your calculator display.

$$0.31 + 2.25 = 2.56$$

2.56

/ 1

38 Find $\sqrt[3]{64}$

$$4 \times 4 \times 4 = 64$$

4

/ 1

39 Find $4.2^2 + 2.8^2$

$$17.64 + 7.84 = 25.48$$

25.48

/ 1

40 Work out $0.71 + 2.8^2$

Write down all the figures on your calculator display.

$$0.71 + 7.84 = 8.55$$

8.55

/ 1

41 Find $\sqrt[3]{39.304}$

$$3.4 \times 3.4 \times 3.4 = 39.304$$

3.4

/ 2

42 Find $1.6^2 - 1.3^2$

$$2.56 - 1.69 = 0.87$$

0.87

/ 2

43 Work out $0.75 + 1.7^2$

Write down all the figures on your calculator display.

$$0.75 + 2.89 = 3.64$$

3.64

2 / 2

44 Find $\sqrt{13.69 \times 3.24}$

$$\sqrt{13.69} = 3.7 \text{ and } \sqrt{3.24} = 1.8$$

$$3.7 \times 1.8 = 6.66$$

6.66

2 / 2

45 Find $4.2^2 + 2.9^2$

$$17.64 + 8.41 = 26.05$$

26.05

2 / 2

46 Work out $0.96 + 3.9^2$

Write down all the figures on your calculator display.

$$0.96 + 15.21 = 16.17$$

16.17

2 / 2

47 Find $\sqrt{(2.56 \times 9.61)}$

$$\sqrt{2.56} = 1.6 \text{ and } \sqrt{9.61} = 3.1$$

$$1.6 \times 3.1 = 4.96$$

4.96

2 / 2

48 Find $3.3^2 + 2^2$

$$10.89 + 4 = 14.89$$

14.89

2 / 2

49 Work out $0.45 \times 0.34 - 3.6$

Write down all the figures on your calculator display.

$$0.153 - 3.6 = -3.447$$

-3.447

/ 2

50 Find $\sqrt{21.16 + 2.6^2}$

$$\sqrt{21.16} = 4.6$$

$$2.6^2 = 6.76$$

11.36

/ 2

51 Find $1.4^2 + 3.8^2$

$$1.96 + 14.44 = 16.4$$

16.4

/ 2

52 Work out $\frac{1}{9} + \frac{1}{2}$

Write your answer as a decimal, correct to 3 decimal places.

$$\frac{11}{18} = 0.61111111$$

0.611

2 / 2

53 Find $\sqrt{(6.76 \times 1.44)}$

$$\sqrt{6.76} = 2.6 \text{ and } \sqrt{1.44} = 1.2$$

$$2.6 \times 1.2 = 3.12$$

3.12

2 / 2

54 Find $4.5^2 - 3^2$

$$20.25 - 9 = 11.25$$

11.25

2 / 2

55 Find $\sqrt{16 + 2.3^2}$

$$\sqrt{16} = 4$$

$$2.3^2 = 5.29$$

9.29

/ 2

56 Find $\sqrt{(5.76 \times 9.61)}$

$$\sqrt{5.76} = 2.4 \text{ and } \sqrt{9.61} = 3.1$$

$$2.4 \times 3.1 = 7.44$$

7.44

/ 2

57 Find $3.4^2 - 1.3^2$

$$11.56 - 1.69 = 9.87$$

9.87

/ 2

58 Find $\sqrt{10.89 + 1.9^2}$

$$\sqrt{10.89} = 3.3$$

$$1.9^2 = 3.61$$

6.91

/ 2

59 Find $\sqrt{(8.41 \times 2.56)}$

$$\sqrt{8.41} = 2.9 \text{ and } \sqrt{2.56} = 1.6$$

$$2.9 \times 1.6 = 4.64$$

4.64

/ 2

60 Work out $\frac{8}{11} \times \frac{4}{5}$

Write your answer as a decimal, correct to 3 decimal places.

$$\frac{32}{55} = 0.58181818$$

0.582

/ 2

61 Find $\sqrt{32.49 + 5.5^2}$

$$\sqrt{32.49} = 5.7$$

$$5.5^2 = 30.25$$

35.95

2 / 2

62 Work out $0.6 \times 0.19 - 2.3$

Write down all the figures on your calculator display.

$$0.114 - 2.3 = -2.186$$

-2.186

2 / 2

63 Find $\sqrt{(10.24 \times 3.24)}$

$$\sqrt{10.24} = 3.2 \text{ and } \sqrt{3.24} = 1.8$$

$$3.2 \times 1.8 = 5.76$$

5.76

2 / 2

64 Work out $\frac{4}{5} \times \frac{5}{6}$

Write your answer as a decimal, correct to 3 decimal places.

$$\frac{2}{3} = 0.6666666667$$

0.667

2 / 2

65 Find $\sqrt{27.04 + 5.1^2}$

$$\sqrt{27.04} = 5.2$$

$$5.1^2 = 26.01$$

31.21

2 / 2

66 Work out $0.59 \times 0.46 - 2.1$

Write down all the figures on your calculator display.

$$0.2714 - 2.1 = -1.8286$$

-1.8286

2 / 2

67 Work out $\frac{1}{7} - \frac{1}{9}$

Write your answer as a decimal, correct to 3 decimal places.

$$\frac{2}{63} = 0.03174603175$$

0.032

2 / 2

68 Find $\sqrt{3.61 + 1.1^2}$

$$\sqrt{3.61} = 1.9$$

$$1.1^2 = 1.21$$

3.11

2 / 2

69 Find $\sqrt{(2.89 \times 4.84)}$

$$\sqrt{2.89} = 1.7 \text{ and } \sqrt{4.84} = 2.2$$

$$1.7 \times 2.2 = 3.74$$

3.74

2 / 2

70 Work out $\frac{3}{4} \times \frac{7}{12}$

Write your answer as a decimal, correct to 3 decimal places.

$$\frac{7}{16} = 0.4375$$

0.438

2 / 2

71 Work out $0.97 \times 0.43 - 3.2$

Write down all the figures on your calculator display.

$$0.4171 - 3.2 = -2.7829$$

-2.7829

2 / 2

72 Find $\sqrt{5.29 \times 1.96}$

$$\sqrt{5.29} = 2.3 \text{ and } \sqrt{1.96} = 1.4$$

$$2.3 \times 1.4 = 3.22$$

3.22

2 / 2

73 Work out $\frac{4}{5} - \frac{2}{7}$

Write your answer as a decimal, correct to 3 decimal places.

$$\frac{18}{35} = 0.5142857143$$

0.514

2 / 2

74 Work out $0.59 \times 0.21 - 1.4$

Write down all the figures on your calculator display.

$$0.1239 - 1.4 = -1.2761$$

-1.2761

2 / 2

75 Find $\sqrt{(14.44 \times 8.41)}$

$$\sqrt{14.44} = 3.8 \text{ and } \sqrt{8.41} = 2.9$$

$$3.8 \times 2.9 = 11.02$$

11.02

2 / 2

76 Work out $\frac{1}{4} + \frac{5}{6}$

Write your answer as a decimal, correct to 3 decimal places.

$$\frac{13}{12} = 1.08333333$$

1.083

3 / 3

77 Work out $0.56 \times 0.4 - 1.3$

Write down all the figures on your calculator display.

$$0.224 - 1.3 = -1.076$$

-1.076

3 / 3

78 Find $\sqrt{(3.24 \times 4)}$

$$\sqrt{3.24} = 1.8 \text{ and } \sqrt{4} = 2$$

$$1.8 \times 2 = 3.6$$

3.6

3 / 3

79 Work out $(\sqrt{5.29 + 4.8}) \div 4$

$$(2.3 + 4.8) \div 4$$

1.775

3 / 3

80 Work out $(0.96 - 0.22)^2 - 0.64$

Write down all the figures on your calculator display.

$$(0.74)^2 = 0.5476$$

$$0.5476 - 0.64$$

-0.0924

3 / 3

81 Work out $(3.93 + 8.5^2) \div 0.55$

(a) Write down all the figures on your calculator display.

(b) Write your answer to part (a) correct to 2 decimal places.

$$3.93 + 72.25 = 76.18$$

$$\div 0.55$$

(a) 138.5090909 (b) 138.51

3 / 3

82 Work out $(\sqrt{7.29 + 8.6}) \div 5$

$$(2.7 + 8.6) \div 5$$

2.26

3 / 3

83 Work out $(0.68 - 0.48)^2 - 0.87$

Write down all the figures on your calculator display.

$$(0.2)^2 = 0.04$$

$$0.04 - 0.87$$

-0.83

3 / 3

84 Work out $(7.83 + 2.3^2) \div 0.24$

(a) Write down all the figures on your calculator display.

(b) Write your answer to part (a) correct to 3 decimal places.

$$7.83 + 5.29 = 13.12$$

$$\div 0.24$$

(a) 54.66666667 (b) 54.667

3 / 3

- 85 Work out $(\sqrt{13.69 + 9.8}) \div 8$
 $(3.7 + 9.8) \div 8$

1.6875

3 / 3

- 86 Work out $(0.32 - 0.12)^2 - 0.41$
 Write down all the figures on your calculator display.
 $(0.2)^2 = 0.04$
 $0.04 - 0.41$

-0.37

3 / 3

- 87 Work out $(2.89 + 1.5^2) \div 0.19$
 (a) Write down all the figures on your calculator display.
 (b) Write your answer to part (a) correct to 3 decimal places.
 $2.89 + 2.25 = 5.14$
 $\div 0.19$

(a) 27.05263158 (b) 27.053

3 / 3

- 88 Work out $(\sqrt{11.56 + 5.3}) \div 8$
 $(3.4 + 5.3) \div 8$

1.0875

3 / 3

- 89 Work out $(0.72 - 0.34)^2 - 0.87$
Write down all the figures on your calculator display.
 $(0.38)^2 = 0.1444$
 $0.1444 - 0.87$

-0.7256

3 / 3

- 90 Work out $(3.01 + 5.2) \div (0.38 + 1)$
(a) Write down all the figures on your calculator display.
(b) Write your answer to part (a) correct to 2 decimal places.

$$8.21 \div 1.38$$

(a) 5.949275362 (b) 5.95

3 / 3

- 91 Work out $(\sqrt{12.25 + 6.2}) \div 5$
 $(3.5 + 6.2) \div 5$

1.94

3 / 3

- 92 Work out $(0.32 - 0.23)^2 - 0.19$
 Write down all the figures on your calculator display.
 $(0.09)^2 = 0.0081$
 $0.0081 - 0.19$

-0.1819

3 / 3

- 93 Work out $(6.71 + 7.6) \div (0.33 + 1)$
 (a) Write down all the figures on your calculator display.
 (b) Write your answer to part (a) correct to 3 decimal places.

$$14.31 \div 1.33$$

(a) 10.7593985 (b) 10.759

3 / 3

94 Work out $(\sqrt{1.96 + 5.5}) \div 2$

$$(1.4 + 5.5) \div 2$$

3.45

3 / 3

95 Work out $(\sqrt{1.96 + 2.1}) \div 8$

$$(1.4 + 2.1) \div 8$$

0.4375

3 / 3

96 Work out $(4.8 + 5.9) \div (0.23 + 1)$

(a) Write down all the figures on your calculator display.

(b) Write your answer to part (a) correct to 2 decimal places.

$$10.7 \div 1.23$$

(a) 8.699186992 (b) 8.7

3 / 3

97 Work out $(5.35 + 7.4) \div (0.18 + 1)$

(a) Write down all the figures on your calculator display.

(b) Write your answer to part (a) correct to 2 decimal places.

$$12.75 \div 1.18$$

(a) 10.80508475 (b) 10.81

3 / 3

98 Work out $(9.33 + 4.1) \div (0.52 + 1)$

(a) Write down all the figures on your calculator display.

(b) Write your answer to part (a) correct to 2 decimal places.

$$13.43 \div 1.52$$

(a) 8.835526316 (b) 8.84

3 / 3

99 Work out $(8.05 + 7^2) \div 0.46$

(a) Write down all the figures on your calculator display.

(b) Write your answer to part (a) correct to 3 decimal places.

$$8.05 + 49 = 57.05$$
$$\div 0.46$$

(a) 124.0217391 (b) 124.022

3 / 3

100 Work out $(8.5 + 3.9) \div (0.19 + 1)$

(a) Write down all the figures on your calculator display.

(b) Write your answer to part (a) correct to 2 decimal places.

$$12.4 \div 1.19$$

(a) 10.42016807 (b) 10.42

3 / 3